

REMARKS

Upon entry of the present amendment, claims 20-28 will remain pending in the above-identified application, and stand ready for further action on the merits.

The amendments made herein to the claims do not incorporate new matter into the application as originally filed. Support for the amendments occur in original claims 1-19, and in the original application as filed (e.g., see pages 2-3, 7 and 20, etc.).

It is also noted that the new abstract added to the application does not incorporate new matter into the application, since it finds support at page 1 (PCT cover sheet) of the original filed application.

Based upon the above considerations, entry of the present amendment is respectfully requested.

Abstract of the Disclosure

A new abstract of the disclosure has been provided on a separate sheet. The new abstract is in the format of one paragraph, and is not more than 150 words in length. The abstract fully complies with the requirements of 37 CFR § 1.52(b)(1).

Claim Rejections Under 35 USC § 112

Claims 1, 18 and 19 have been rejected under 35 USC § 112, first paragraph, based on an allegation of non-enablement. Claims

1-17 and 19 have also been rejected under 35 USC § 112, second paragraph, based on an allegation of indefiniteness. Reconsideration and withdrawal of each of these rejections is respectfully requested based upon the following considerations.

First, it is noted that prior claims 1-19 have been cancelled, and that claims 20-28 are now pending in the application.

Claims 20-28 have been drafted specifically to particularly and distinctly set forth the inventive discovery that the present inventors regard as their own. 35 USC § 112, second paragraph requires no more. Further, concerning 35 USC § 112, first paragraph, it is submitted that the claims as instantly amended are fully supported and enabled by the disclosure in the original application. In this respect, a disclosure is enabling, even if a considerable amount of experimentation is involved, if it is merely routine, Ex Parte Formal, 230 USPQ 546 (BPAI 1986). The first paragraph of 35 USC § 112 also requires nothing more than objective enablement, and how this is accomplished is of no importance, In Re Marzocchi, 169 USPQ 367 (CCPA 1971), and thus an invention need not be described with identical terms used in the claims thereto, In Re Wright, 6 USPQ2d 1959 (Fed. Cir. 1988).

Based on the above considerations, the Examiner is respectfully requested to withdraw all prior rejections set forth under 35 USC § 112, first and second paragraphs, and to not reapply such rejections against any of the newly presented claims 20-28.

Claim Rejections Under 35 USC § 102/103

Claims 1-2, 5 and 18-19 have been rejected under 35 USC § 102(b) as being anticipated by Feig (US 3,711,884). Further, claim 18 has been rejected under 35 USC § 102(b) as being anticipated by JP-05-15481. Still further, claims 3-4, 6-17 and 19 have been rejected under 35 USC § 103(a) as being unpatentable over Feig (US '884) in view of Lohr et al. (US 4,347,151). Reconsideration and withdrawal of each of these rejections is requested based upon the amendments made herein to the claims, and the following considerations.

The Present Invention and Its Advantages

The present invention relates to a method for cleaning a hard-surface and a detergent-impregnated article suitable for use in such a method. The detergent-impregnated article comprises a base body and a detergent. The detergent comprises solid abrasive particles, a protective layer-forming component and water. The detergent is impregnated in the base body. In other words, the impregnated article is in a wet state.

The solid abrasive particles contained in the detergent consist of organic polymer particles and/or inorganic particles. The solid abrasive particles are supplied on a surface to be cleaned upon cleaning with the impregnated article.

The protective layer-forming component is made of a material that can form a protective layer on a surface to be cleaned upon cleaning with the impregnated article.

The base body is made of a material that can absorb 50 to 5,000% by weight of the detergent, and comprises paper, nonwoven fabric, woven fabric, knitted fabric or a flexible porous structure.

According to the present invention, upon cleaning a hard surface, the detergent containing 50 to 98.9% by weight of water is released from the impregnated article which contains 50 to 5000% by weight of the detergent, and thus the solid abrasive particles are supplied on a surface to be cleaned and are mixed with dirt present on the surface. The dirt is released from the surface in a powdered state, whereby the surface is cleaned up. In addition, the protective layer-forming component is released from the impregnated article and forms a protective layer on the surface. The protective layer imparts stain resistance to the surface.

Distinctions Over the Cited Art

US 3,711,884

The cited reference, US '884, discloses a cleaning and polishing cloth. The cloth comprises a carrier material and a porous oxide polishing agent. The polishing agent is bound to the carrier material by means of a water swellable polymer binding

agent. The cloth is prepared by impregnating the carrier material with a coating composition containing the polishing agent, the binding agent and water, and then allowing the impregnated carrier material to dry at, for example, 120°C, thereby binding the polishing agent to the carrier material. Apparently, the finished cloth is in a dry state.

The present invention is entirely different from US 3,711,884 and it is submitted that the present invention is both novel and non-obvious over the cited reference.

First it should be noted that the claimed impregnated article is in a wet state, whereas the cloth of the cited US '884 reference is in a dry state. The present invention is also distinguishable over the cited reference, based on the recitation in the claims that the detergent used in the impregnated article contains water, and that the base body is of a material capable of absorbing 50 to 5,000% by weight of the detergent (e.g., see claim 20).

It should also be noted that the solid abrasive particles used in the impregnated article are not bound to the base body and thus can be supplied on a surface to be cleaned. In contrast, in the cloth of the cited US '884 reference, the polishing agent is bound to the carrier material. Therefore, the polishing agent cannot be released from the carrier material and is not supplied on a surface to be cleaned, thereby resulting in poor cleaning performance.

Another noted difference is that a protective layer-forming component is not employed in US '884. The water swellable polymer binding agent used in US '884 does not form a protective layer on a surface to be cleaned. Instead, the binding agent used therein is intended to bind the polishing agent to the carrier material. There is no disclosure or suggestion in US '884 to use a binding agent to form a protective layer on a surface to be cleaned.

According to the present invention, it is possible to clean surfaces with the detergent-impregnated article alone without using any additional detergent, dirt present on a surface to be cleaned mixes with the solid abrasive particles in the detergent supplied on the surface by the impregnated article and is thus released from the surface in a powdered state, and the protective layer-forming component contained in the detergent coats the surface to thereby form a protective layer.

In view of the discussion set forth above, it is apparent that the claimed invention is novel and non-obvious over US '884.

JP-A-5-15481

JP '481 discloses a wiping cloth impregnated with a detergent. The detergent contains water or an alcohol, and optionally contains a surface coating agent such as a silicone resin and a flourine resin, and fixing agent for the surface coating agent such as

sulfuric acid and sulfamic acid. Apparently, the detergent does not contain solid abrasive particles.

As stated above, JP '481 does not teach or suggest the use of solid abrasive particles. Therefore, the wiping cloth of JP '481 cannot effectively abrade and remove dirt from a surface to be cleaned. Although JP '481 employs fibers having the function of removing dirt, such fibers include, e.g., ultrafine fibers and split fibers and are not considered to have enough ability to effectively remove dirt. In summary, JP '481 does not teach or suggest that the solid abrasive particles are mixed with dirt present on a surface to be cleaned thereby to release the dirt from the surface in a powdered state.

Accordingly, the disclosure of the cited JP '481 reference is incapable of either anticipating or rendering the instant invention obvious.

US 4,347,151

Lohr et al., US '151, discloses a cleaner polish for kitchen and bathroom surfaces. The cleaner polish contains a surfactant, an abrasive agent, dimethyl silicone fluid, isoparaffinic hydrocarbon, a polymer and water. As such, the cited Lohr et al. reference is incapable of curing the above noted deficiencies in the cited US '884 reference, and their combination is incapable of rendering the instant invention obvious.

Accordingly, based on the above considerations, it is clear that none of the cited references being relied upon by the Examiner are capable of anticipating the present invention as claimed. Further, such references, whether considered singularly or in combination, are incapable of motivating one of ordinary skill in the art to arrive at the invention as claimed, such that a rejection based thereon under 35 USC § 103 would not be proper and would not be sustainable.

Accordingly, for the above reasons, reconsideration and withdrawal of each of the outstanding prior art rejections of record is respectfully requested.

CONCLUSION

Based upon the amendments and remarks presented herein, the Examiner is respectfully requested to issue a Notice of Allowance clearly indicating that each of applicants' pending claims 20-28 are allowed and patentable under the provisions of Title 35 of the United States Code.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact John W. Bailey (Reg. No. 32,881) at the telephone number below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

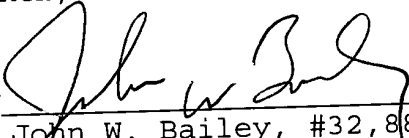
Attached hereto is a marked-up version of the changes made to the application by this Amendment.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By



John W. Bailey, #32,881

P.O. Box 747

Falls Church, VA 22040-0747

(703) 205-8000

JWB/end
0445-0272P

Attachment: Version with Markings to Show Changes Made

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claims 1-19 have been canceled.

Claims 20-28 have been added.

ABSTRACT OF THE DISCLOSURE

A detergent-impregnated article, especially suitable for cleaning hard surface such as glass, characterized in that a base body is impregnated with a detergent comprising solid abrasive particles, a protective layer-forming component, an organic solvent, a drying accelerator, a thickening polysaccharide and a surface active agent.